

### **REMARKS/ARGUMENTS**

Claims 34 to 62 remain in this application. Claims 1 to 33 have been cancelled, without prejudice. None of the claims are currently amended, but are listed for the convenient reference of the Examiner.

In paragraph 4, near the middle of page 2 of the Office Action mailed September 22, 2006 (the "latest Office Action"), claims 34 to 46 and 48 to 62 have been rejected under 35 U.S.C. 103(a) as being obvious over Erb et al. U.S. Patent No. 3,932,245 (Erb) in view of Fry et al. U.S. Patent No. 4,614,680 (Fry) and Arendt et al. U.S. Patent No. 5,990,214 (Arendt).

The Applicants have discovered that, contrary to the understanding of those of ordinary skill in the art, a substrate with very fine embossing or texturing can have a wear layer applied that results in the very fine embossing or texture being carried through the wear layer. That is, the upper and lower surfaces of the wear layer closely follow the contour of the very finely embossed or textured substrate. This is accomplished by controlling the viscosity of the melt processable polymer resin, which forms the wear layer, between about 4,500 to about 70,000 poise at some temperature between 225°F and 425°F and applying the melt processable polymer resin to the very finely textured substrate by hot melt calendaring or extrusion. The very finely textured wear layer is not obtained using other materials or other methods.

Each of the independent claims requires the textured substrate to have an area with a very fine embossing or texture, defined by a specified difference in height of about

1 mil, about 2 mils or about 1 mil to about 5 mils over no more than about 20 mils horizontal distance. None of the cited prior art teaches or suggests such a limitation.

Below the middle of page 5 of the latest Office Action, the Examiner states “Applicant has not provided evidence comparing the prior art with the instant claimed invention to show Applicant’s unexpected results.” If the Examiner is looking for comparative test results, such is impossible to develop. One cannot test the understanding of those of ordinary skill in the art.

The proof that those of ordinary skill in the art do not believe that the very fine embossing or texturing of a substrate can be carried through the wear layer so that the wear layer applied to the substrate has the same very fine embossing or texture is that the neither Attorney for Applicants nor the Examiner can find any prior art reference that teaches that understanding. Attorney for Applicants cannot prove a negative, i.e. that no one of ordinary skill in the art has applied a wear layer to a finely textured substrate to obtain a finely textured wear layer.

Further, it is not possible to do a comparative test of the closest prior art, because the closest prior art does not include a wear layer overlying a very finely textured substrate as defined in the present claims. To require Applicants to test the wear layers of the prior art over a very finely textured wear layer, which is not disclosed in the prior art, is impermissible.

Applicants are not arguing that the present invention yields unexpected results, but that since those of ordinary skill in the art do not expect a very fine texture to be carried through a melt processable composition wear layer, such a structure does not exist

in the prior art. Absent a teaching in the prior art of the very fine texture of a substrate, as defined in the present claims, carrying through a wear layer, the present claims must be allowed.

In the carryover paragraph on pages 2 and 3 of the latest Office Action, the Examiner states that “[the wear] layer [of Erb] conforms to the textured surface [of the substrate], whereby the first and second surfaces [of the wear layer] substantially follow the contours of the textured surface [of the substrate] (*6 and 8*).” Italics in original.

Figures 6 and 8 of Erb show the surfaces of the wear layer 17a following the contour of the foamed resin layer 9a and not the texture of the felt web W. While the felt web W may have a fine texture as defined in the independent claims, the foamed resin layer 9a does not. Therefore, the wear layer does not conform to the fine texture of the substrate as required by the present claims and the claims are allowable over Erb in view of Fry and Arendt.

If the Examiner takes the position that the foamed resin layer 9a is the substrate, it does not have the very fine texture required by the present claims. Therefore, the present claims must be allowed over Erb in view of Fry and Arendt for this reason as well.

Near the top of page 3 of the latest Office Action, the Examiner notes that “Erb fails to disclose that the melt processable polymer resin contains a melt processing aid.” She then takes the position that the Arendt “resin also includes a plasticizing [sic, plasticizing] additive, i.e. melt processing aid, such as oils and lubricants (*col. 3, lines 11-16*). Italics in original.

This is incorrect. The invention of Arendt is a liquid composition comprising mixtures of esters. (See the Abstract and column 1, lines 6 to 11, for example.) At column 3, lines 11 to 16, Arendt states:

“The present invention also provides compositions comprising 1) an organic polymer such as polyvinyl chloride and 2) up to about 60 weight percent of the present liquid ester compositions as plasticizers. The ester compositions can also be included as plasticizing additives in liquid compositions such as oils and lubricants.”

(Emphasis supplied.) Therefore, Arendt teaches that his ester can be used as a plasticizer in polyvinyl chloride composition or as a plasticizer in an oil or lubricant. Arendt teaches the combination of polyvinyl chloride and a plasticizer and the combination of a lubricant and a plasticizer, but not the combination of polyvinyl chloride and a lubricant.

Therefore, claims 35, 37, 39, 41, 43, 45, 51, 60 and 62, which required the processing aid to be a lubricant, are allowable over Erb in view of Fry and Arendt for this reason as well.

With regard to independent claims 36, 42 and 59, which require a specified viscosity of the melt processable composition, near the middle of page 3 of the latest Office Action, the Examiner states that

“Arendt also discloses that the plasticizer increases the viscosity of the resin (*col. 8, lines 49-58*). Therefore, the exact viscosity of the melt processable composition is deemed to be a result effective variable with regard to the melt processing aid. It would require routine experimentation to determine the optimum value of a result effective variable, such as viscosity, in the absence of a showing of criticality in the claimed viscosity. One of ordinary skill in the art would have been motivated to optimize the viscosity of the melt processable composition depending on what type of aids were [sic, was] needed.”

(Italics in original, citations omitted.) However, the method of manufacture of Erb is not the same as that of the present invention. Optimizing the viscosity of the Erb process, which requires mechanically embossing the top coat covered foam layer (see column 10,

lines 26 to 68), would not necessarily yield the claimed viscosity, which yields the very fine textured wear layer by applying a melt processable resin with the claimed viscosity over a very fine textured substrate. Optimizing the viscosity of a mechanical embossing process would not necessarily yield the optimized claimed ranges for applying a melt processable wear layer composition to a fine textured substrate to obtain a fine texture on the surface of the wear layer. There is no teaching or suggestion that the optimized viscosity of Erb process is the same as for the present process and set forth in claims 36, 42 and 59. Without such a teaching or suggestion claims 36, 42 and 59 must be allowed.

In the previous Amendment and Response, the Examiner was asked that if she disagreed, to explain where in the cited art there is a teaching or suggestion of forming a textured wear layer with a resin of the claimed viscosity, or if the rejection is based on facts within the personal knowledge of the Examiner, support in the form of an affidavit is requested, in accordance with MPEP section 707. Neither was supplied in the latest Office Action. Without such support, independent claims 36, 42 and 59, which require the viscosity of the melt processable composition to be between about 4,500 to about 70,000 poise at some temperature between 225°F and 425°F, must be allowed.

At the bottom of page 3 and top of page 4 of the latest Office Action, the Examiner states:

“Fry discloses that the configuration of the base layer can be varied as desired to provide different constructions of the decorative product of the invention (*col. 4, lines 21-24*). Furthermore, the configuration can provide different height, differential texture and differential gloss features as desired to impart an overall pleasing aesthetic quality which is eminently desirable in floor covering products (*col. 2, line 66 through col. 3, line 2*).

“Therefore, the exact texture height to horizontal distance of the surface texture is deemed to be a result effective variable with regard to the desired aesthetic effect. It would require routine experimentation to determine the optimum value of a result effective variable, such as texture height to vertical [sic, horizontal] distance. One of ordinary skill in the art would have been motivated by optimize the texture height to vertical [sic, horizontal] distance in order to create different aesthetic effect, such as differential texture and gloss levels.”

(Italics in original, citations omitted.)

First, in the carryover paragraph on columns 2 and 3 of Fry, which was cited by the Examiner, Fry states that

“[t]he configuration of the wear layer 12 can provide differential height, differential texture and differential gloss features as desired to impart an overall pleasing aesthetic quality which is eminently desirable in floor covering products.”

Therefore, it is the configuration of the wear layer and not the substrate which may be optimized in accordance with the cited passage of Fry and the Examiner’s reasoning.

Optimizing the configuration of the wear layer does not lead one of ordinary skill to the fine textured substrate, which is defined in the present claims.

Secondly, there is nothing in Fry or Erb or Arendt to suggest the fine textured substrate of the present claims. “Optimizing” the texture height to horizontal distance of Fry would not necessarily lead to the claimed invention, because there is no suggestion in Fry that a fine texture is desired. Therefore, the cited art does not anticipate or make obvious the claimed fine texture. As held by the Court of Appeals for the Federal Circuit in *In re Kotzab*, 217 F.3d 1365, 1370 (Fed.Cir. 2000):

“Even when obviousness is based on a single prior art reference, there must be a showing of a suggestion or motivation to modify the teachings of that reference.”

(Citations omitted.) The Examiner has failed to identify what in Fry or the other cited references would lead one of ordinary skill in the art to optimize the texture height to horizontal distance to that required by the present claims. Therefore, the present claims are allowable over Erb in view of Fry and Arendt.

The Examiner argues that one of ordinary skill in the art would have been motivated by optimize the texture height to vertical [sic, horizontal] distance in order to create different aesthetic effect, such as differential texture and gloss levels. The Examiner does not indicate what the optimized texture height is and more importantly none of the cited art, including Fry, teaches or suggests that the optimized texture would be a very fine texture. There is no motivation to optimize the texture of the substrate to a very fine texture.

Denominating something a result effective variable does not mean that any value of the variable is taught by the reference. As held by the courts, it would be obvious to optimize the variable, but unless there is some indication in the prior art as to what the optimized result is to be, there is no suggestion as to how to optimize the variable. There is nothing in Fry that indicates what an optimized texture would be. Therefore, there is no suggestion to change the texture of the Fry substrate to the very fine texture defined in the present claims.

In fact, as suggested by Fry, a fine texture can be obtained by changing the structure of the wear layer and not by changing the structure of the substrate. Therefore, since there is no suggestion to modify the substrate, Fry does not make the claimed very finely textured substrate obvious. See the holding of the Court of Appeals for the Federal

Circuit in In re Kotzab, supra. Absent some motivation, suggestion or teaching of the desirability of selecting a substrate with the very fine texture required by the present claims, the present claims must be allowed.

Again, even if one of ordinary skill in the art were motivated to optimize (“make the best or most effective use of”) the texture height to horizontal distance, he would not necessarily be led to make a very fine texture, i.e. a very fine texture is not necessarily the best or most effective texture. As held by the Court of Appeals for the Federal Circuit in *In re Fine*, 837:

“The PTO has the burden under section 103 to establish a *prima facie* case of obviousness. It can satisfy this burden only by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the relevant teachings of the references. This it has not done. The Board points to nothing in the cited references, either alone or in combination, suggesting or teaching Fine's invention.

(Citations omitted.) There is no teaching or suggestion in Fry or Erb or Arendt of a very fine texture. In fact, there is no indication that a very fine texture, which can be obtained by the present process of applying a melt processable resin to a previously very fine textured substrate, can be achieved by the Fry process, which requires drawing a vacuum on the film 19 to form the top layer 12 (see column 5, lines 4 to 21). Unless the Examiner can point to some teaching or suggestion in the prior art that the process of Fry can produce a very fine textured wear layer and that a very fine texture is an optimum texture, independent claims 34, 36, 40, 42, 46 and 59, which claim specific textured height differences over no more than 20 mils horizontal distance must be allowed.



Claim 47 has been rejected as being obvious over Erb in view of Fry and Arendt, and further in view of Smith U.S. Patent No. 4,312,686 in paragraph 5 on page 4 of the latest Office Action. Claim 47 is dependent on claim 46 and is allowable along with claim 46.

Claim 48 requires the melt processable resin to comprise a general purpose polyvinyl chloride resin. This is a specific type of resin that yields the claimed very fine textured surface covering. None of Erb, Fry or Arendt teaches or suggests this resin.

The Examiner has not addressed this issue or the arguments presented in the previous Amendment and Response directed to claims 52, 54 and 55. Therefore, claims 48, 52, 54 and 55 are allowable over Erb in view of Fry and Arendt.

Claim 52 requires the textured substrate to which the wear layer conforms to comprise a fibrous material adjacent the texture surface of the textured substrate. The substrate that is coated with the wear layer in Erb is a foamed layer, the substrate of Fry is not fibrous and there is no teaching or suggestion in Arendt of a fibrous substrate. Therefore, claim 52 is allowable over Erb, Fry and Arendt.

Claim 54 requires the textured substrate to comprise a particulate material adjacent the textured surface of the textured substrate. Claim 55 requires specifically listed particulate material. None of Erb, Fry or Arendt teach or suggest a particulate material. Therefore, claims 54 and 55 are allowable over Erb, Fry and Arendt.

All of the rejections to the independent claims have been met and Attorney for Applicants submits that all the claims are in a condition for allowance. Therefore, a timely Notice of Allowance is earnestly solicited.

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Respectfully submitted,

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